



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF PREVENTION, PESTICIDES  
AND TOXIC SUBSTANCES

October 18, 2007

MEMORANDUM

SUBJECT: Effects Determinations for Oxydemeton-methyl (ODM) Relative to the California Red-Legged Frog and Designated Critical Habitat

FROM: Donna Randall *Donna Randall 10/18/2007*  
ERB II  
Environmental Fate and Effects Division

TO: Arthur-Jean B. Williams, Acting Director  
Environmental Fate and Effects Division

Attached is the assessment of potential direct and indirect effects to the California red-legged frog (CRLF) and potential adverse modification to designated critical habitat from uses of the insecticide oxydemeton-methyl (ODM). While the Endangered Species Act requires we assess uses of pesticides relative to any potentially affected listed species, this assessment focuses only on the CRLF, including designated critical habitat, addressing provisions of a settlement agreement entered into by the federal government to resolve claims made by plaintiffs against EPA in a court case (CBD v. EPA<sup>1</sup>).

The attached assessment was conducted consistent with the Agency's Overview Document<sup>2</sup>. Effects determinations for this assessment are summarized below:

- A "No Effect" ("NE") conclusion was determined for all non-food uses (shrubs; and shade, ornamental, forest, non-crop-bearing, and Christmas trees) for which tree injection application methods are used because there is no exposure pathway that would reach aquatic- or terrestrial-phase CRLF nor directly or indirectly alter its critical habitat.
- A "NE" determination was concluded for all ODM food crop uses from indirect effects to the aquatic-phase and terrestrial-phase CRLF and aquatic and terrestrial critical habitat arising from reduction or modification of the aquatic plant community or from degradation of riparian plants. This conclusion is based on lack of exceedence of the plant LOC for all food crop uses.

<sup>1</sup> Settlement agreement of October 20, 2006: Center for Biological Diversity v. United States Environmental Protection Agency. Civ. No: 02-1580-JSW(JL)).

<sup>2</sup> Overview of the Ecological Risk Assessment: Process in the Office of Pesticide Programs, U.S. Environmental Protection Agency: Endangered and Threatened Species Effects Determinations: January 23, 2004.

- A “NE” determination was made for all food crop uses except broccoli, cauliflower, brussel sprouts, and lettuce on the aquatic-phase CRLF or aquatic components of the critical habitat based on no exceedence of acute endangered or chronic LOCs for direct effects; no indirect effects on aquatic invertebrate and vertebrate food resources; no effect on the aquatic plant food resources; and no effect on aquatic critical habitat components.
- A “Not Likely to Adversely Affect” (“NLAA”) determination was made for lettuce on the aquatic-phase CRLF based on insignificant indirect aquatic vertebrate food resource effects; no exceedence of acute endangered or chronic LOCs for direct effects; no indirect effects on aquatic invertebrate food resources; no effect to the aquatic plant food resources; and no effect on aquatic critical habitat components.
- A “Likely to Adversely Affect” (“LAA”) determination was concluded for ODM use on broccoli, cauliflower, and brussel sprouts as a result of estimated direct chronic effects on the aquatic-phase CRLF and indirect effects resulting from reduction in the fish and aquatic-phase amphibian prey base due to exceedence of the chronic LOC.
- A “LAA” determination was concluded for all ODM food crop uses from direct effects to the terrestrial-phase CRLF due to acute and chronic effects to the CRLF. This conclusion was made because RQs for birds (the surrogate species for the CRLF) exceed the acute endangered and chronic LOCs for the use with the lowest application rate (walnuts).
- A “LAA” determination was concluded for all ODM food crop uses from indirect effects to the terrestrial-phase CRLF and its Critical Habitat as a result of effects to multiple components of the CRLF’s terrestrial food base (amphibians, invertebrates, mammals) caused by all uses of ODM. RQs for these taxa exceed their respective acute and chronic LOCs at the lowest application rate.

As required by the Alternative Consultation Agreement EPA entered into with the U.S. Fish and Wildlife Service and National Marine Fisheries Service (Services), I have been trained by the Services to make such determinations. Additionally, this assessment was subjected to internal Agency peer review throughout its development. The review panel included another scientist who has been trained by the Services to make such determinations (Dr. Edward Odenkirchen).

Please let me know if you have any questions regarding this assessment and effects determination for ODM relative to the CRLF and its designated critical habitat.

cc: Steven Bradbury  
Debbie Edwards

Attachments